RESPONSE TO OFFICE ACTION

A. Status of the Power of Attorney

The case is currently being prosecuted by the undersigned at the request of the Assignee. A Revocation and Substitution of the Power of Attorney is being prepared and will be filed in the case when available.

B. Status of the Claims

Claims 1 and 8-11 were pending at the time of the Action. Claims 1 and 8 are currently amended to correct typographic errors. No new matter is added by this amendment.

Applicants note that claims 12-26 were inadvertently marked with the status identifier "cancelled", rather than "withdrawn," in the Responses filed April 20, 2006 and April 10, 2005. The status identifiers are corrected above.

C. Status of the Priority Claim

The Action continues to assert that the current claims are not entitled to the priority date of provisional application Ser. No. 60/098,402 on the basis that certain claim elements are not supported by this application. Applicants respectfully traverse and in no way acquiesce to this assertion, but note that the issue is currently moot because the claims are free of the art, as specifically explained below, regardless of whether the provisional application filing date is used as the effective priority date of the claimed invention.

D. Rejections Under 35 U.S.C. § 103(a)

Claims 1 and 8-11 are rejected under 35 U.S.C. § 103(a) as obvious in view of Trulson *et al.* (EP 0 262 972 A2) and further in view of Simpson *et al.* (1986) and Savka *et al.* (1990). Applicants respectfully traverse as follows:

Trulson *et al.* describe transformation of cucumber tissue with *Agrobacterium rhizogenes*. However, they do not describe chimeric plants comprising transformed roots and wild type shoots, stems, and leaves as is explicitly recited in claim 1. Although the Action, at page 4, quotes sections of the Trulson specification at page 5, line 50, to page 6, line 15, to support the contention that "Trulson teaches a method of producing stably transformed chimeric cucumber...(emphasis added)", this is not accurate. The methods that Trulson teaches do not lead to chimeric plants. Instead, regenerated and fully transformed plants are produced, comparable to those described in the review of related art in the present Specification, for instance at page 3, line 6-7. That is, Trulson *et al.* teach methods (*e.g.* page 6, lines 1-15) that take at least several weeks just to obtain embryoids, which are then dissected and subjected to additional culture to later develop into plants, and these plants are fully transgenic, rather than chimeric.

In contrast, the present claims are directed towards methods for producing stably transformed chimeric plants having transgenic root tissue, in the realization that production of transgenic plant tissue for the purposes of screening for the function or presence of a gene of interest does not require the time and effort associated with regeneration of fully transgenic plants. Instead, as noted in the Specification at page 2, line 30, to page 3, line 17, a rapid method for screening is developed which bypasses the need for complete plant regeneration procedures. Such a method is not taught by Trulson *et al.*, and neither Savka *et al.*, nor Simpson *et al.* cure this deficiency.

Savka *et al.* describe induction of hairy root tissue by *A. rhizogenes* infection of soybean tissue. However, the reference does not describe regeneration of chimeric plants. Instead, it apparently uses hairy root cultures rather than chimeric plants (*e.g.* page 504, right column; page

507, right column) for propagation of soybean cyst nematodes, and the transformed tissues are maintained as root cultures. No chimeric plants are described or apparently contemplated.

Simpson *et al.* likewise describe development of transformed root clones (*e.g.* page 409, section entitled "Plant Transformation", including Table 2), and not chimeric plants comprising transformed roots and wild type stems, shoots, and leaves. For instance, Simpson *et al.* state (at page 409, left column, bottom paragraph) that "...we inoculated inverted stems or hypocotyls of...soybean. The resulting roots were excised and transferred to hormone-free media and grown as separate root clones." Nowhere do Simpson *et al.* describe chimeric plants as presently claimed. Although they mention the potential for regeneration of plants from hairy roots (*e.g.* page 411, right column, 2nd paragraph), such plants would be fully transformed, and non-chimeric. The claimed chimeric plants are therefore clearly distinct from the fully transgenic plants of Trulson, or the root cultures of Simpson and of Savka. Withdrawal of the rejection is thus respectfully requested.

CONCLUSION

In view of the foregoing, Applicants respectfully request favorable consideration of this case.

The Examiner is invited to contact the undersigned attorney at (512) 536-3085 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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